

FIT Happy Hour: Evaluating the Usability of an Eight-Week Asynchronous Fitness Program

Lauren Ho
University of Hawaii
lauren.ho@hawaii.edu
www.fithappyhour.com

Abstract: FIT Happy Hour is a fitness company focused on functional interval training to improve mind-body strength, endurance, and coordination. Established in 2013, the company started with small-group training for women over the age of 30. The success and retention of the members inspired the creation of the FIT Happy Hour website with an eight-week online fitness program for the same target population. The purpose of this usability study was to create and evaluate the ease-of-use of the eight-week online fitness program. More specifically, the usability study assessed the learnability, effectiveness, and satisfaction of the website. The website was created using WordPress with protected content for members only, and YouTube videos were created and used for the workouts and movement demonstrations. The design of the website was guided by concepts from user-centered design and Gestalt design principles to heighten continuity, order, and learnability. The study involved a total of ten participants. All participants were women aged 30 and above. Data were collected via in-person and online one-on-one usability sessions, as well as pre- and post-surveys. The demographic data were summarized with descriptive statistics and the one-on-one sessions and surveys were analyzed. All participants rated the layout and design, ease of navigation, and quality of content as either “excellent” or “good.”

Introduction

With age, the body naturally declines. We often lose interaction with our environment and a sense of awareness of how our bodies move in space. Less movement and activity, paired with unhealthy eating, results in heightened stress, more aches and pain, lower self-esteem, decreases in mood, and more buildup of waste and toxins. Without intervention, this downward spiral can continue. A company the researcher co-founded, FIT Happy Hour, was established to address the need for increased quality and quantity of movement. FIT Happy Hour is a Kailua-based small business that incorporates small group and personal training as well as recovery options such as Fascial Stretch Therapy.

FIT Happy Hour has succeeded in establishing and retaining a core group of members for the group training classes, and the success is predicated on a foundation of community and camaraderie. Therefore, the eight-week online fitness program was created in an effort to expand this fitness community while retaining the camaraderie through different online strategies and mechanisms. Additionally, fitness programs with a target population

of women over the age of 30 with both in-person and online models are lacking, and the FIT Happy Hour online eight-week program sought to address this need.

The eight-week online program is comprised of three workout days per week. The workouts are completely original to FIT Happy Hour and were tested and improved upon with the in-person group training class. Each workout day typically has three videos: (1) Warm Up, (2) Core – Skill – Strength, and (3) Main Workout. These videos are embedded on the website and contain voiceovers with thorough coaching, music, and an athlete doing the entire workout to model each movement and the structure of the workout. Additionally, there are over 30 original movement demonstration videos with information about the target areas, the purpose, and how to do each movement and variation.

The purpose of this usability study was to create and evaluate the ease-of-use of the FIT Happy Hour eight-week online fitness program website. More specifically, the usability study assessed the learnability, effectiveness, and satisfaction of the website. The intention was to generate a program that not only appealed to the target population, but would be utilized by the target population. The overarching goals of the usability study included (1) determining what worked and what did not work on the website, (2) maximizing the learnability of the website based on the completion of tasks, using paths without failing, and minimizing problems, and (3) establishing high levels of satisfaction and effectiveness with positive impressions and engagement.

Literature Review

The FIT Happy Hour website intended to provide targeted content and guidance for a specific audience with a user-centered design (UCD), which is a “design philosophy that seeks to place the end user at the center of the design process” (Harte, Glynn, Rodríguez-Molinero, Baker, Scharf, Quinlan, & Ólaighin, 2017, p. 2). The eight-week program ensures user-centeredness by providing an activity for each day. For example, Mondays and Fridays are allocated as Rest and Recovery Days; Wednesdays and Sundays are Moderate Activity Days; and Tuesdays, Thursdays, and Saturdays are Workout Days. Users can mark each day complete to track their progress, and there are individual pages per week and per day, as well as a full program schedule page.

UCD concepts were balanced with the seven categories of Gestalt’s theory of design in order to ensure that “the aesthetic impact of [the] website [was] immediate and visceral” (Rutherford, 2016). The seven categories include: (1) Symmetry and Order, (2) Simplicity, (3) Similarity, (4) Proximity, (5) Continuity, (6) Figure and Ground, and (7) Closure. These seven categories are elaborated on in the project design section.

Two types of website factors were also utilized to improve user-satisfaction: (1) hygiene: the functionality and serviceability, and (2) motivation: aspects that add value to the website (Zhang & Von Dran, 2000). Attending to these two factors ensure that users effectively navigate and use the website as intended, and are encouraged and motivated to do so. Although beyond the scope of the usability study, the website also seeks to

generate measurable and lasting results. Studies have shown that internet-based interventions have significant and promising effects on weight loss, maintaining weight over time, and increasing physical activity (Lewis, Napolitano, Buman, Williams, & Nigg, 2017; Bacigalupo, Cudd, Littlewood, Bissell, Hawley, & Buckley Woods, 2013; Sherrington, Newham, Bell, Adamson, McColl, & Araujo-Soares, 2016; Seo & Niu, 2015; Boucher, Edwards, Gray, Nada-Raja, Lillis, Tylka, & Horwath, 2016). All in all, users require a positive attitude towards every aspect of the website to improve revisitation and referrals (Lee & Kozar, 2012).

Project Design

The Gestalt Theory of design is based on visual perception and interpretation, and the seven categories inspired the layout, design, and logic of the FIT Happy Hour website (Rutherford, 2016). Among the seven categories, the five most notable and relevant to the website include (1) Simplicity, (2) Similarity, (3) Proximity, (4) Continuity, and (5) Figure and Ground.

Simplicity. The category of simplicity involves the inclusion of necessary information without clutter. Users can access simple, chunked out salient information and can use buttons to gain access to more information (Figure 1). This is a streamlined design that retains the engagement of the user and helps to inform the user of next steps.

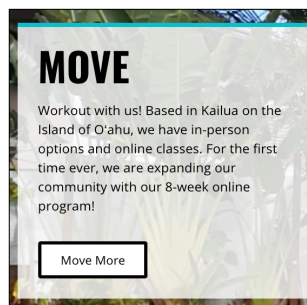


Figure 1. Simplicity of Chunked Content with Button

Similarity. The website has over 130 pages in total. Therefore, maintaining the integrity and simplicity of the website was balanced with consistency and similarity of pages with the same purpose. For example, each Workout Day has the same layout, each Rest and Recovery Day is identical in layout and content, and the Moderate Activity Days are also identical in layout and content (Figure 2). The formatting is similar and predictable for users. Additionally, the main menu, the footer menus, and the side social menu are identical on every page of the website.

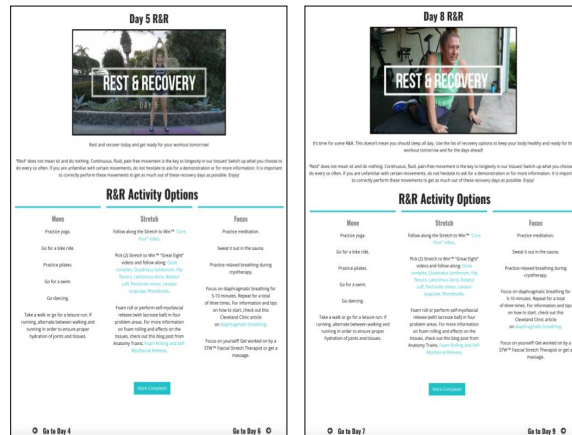


Figure 2. Similarity Shown with Side-By-Side View of Two Rest and Recovery Days

Proximity. The website groups content with clear use of titles and headers and implements small chunks of information and content per page instead of having long pages that require a lot of scrolling. Users within the target population tend to search within each page less and tend to scroll less. Therefore, content and important information needed to be predictable and close. Ensuring close proximity and predictability can heighten user learnability.

Continuity. The eight-week program has page by page navigation to create navigable paths for users. Additionally, instructional design elements such as incentives and progress measures were included. For example, users can click a button to mark it “complete” at the bottom of the page (Figure 3).



Figure 3. Example of an Unclicked “Mark Complete” Button

When clicking on this “Mark Complete” button, a unique message for the particular day pops up as a reward of progress and completion (Figure 4).

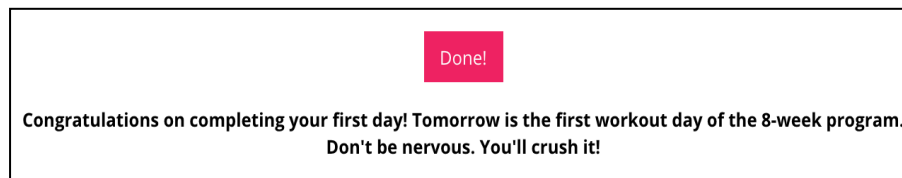


Figure 4. Example of a Clicked “Mark Complete” Button

Additionally, each time a button is marked complete, it automatically increases the measure of progress on the “Member Progress” page, and the full program schedule is checked off and greyed to indicate completion (Figures 5 and 6).

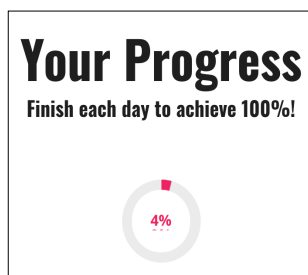


Figure 5. Example of Member Progress with 4% Complete



Figure 6. Example of Program Schedule with Days 1 and 2 Complete

Figure and Ground. – Figure and ground refers to ambiguity the person has in perceiving or deciphering between what is figure and what is background. For example, the top of the homepage has a large photo stretched across the top with three boxes with three notable boxes that highlight “Move,” “Recover,” and “Learn” (Figure 7). There is ambiguity as to what is most notable, and that balance allows the user to feel happy and invited to learn more about the content of the website with the photograph and interested in the content because it is bolded and succinct.

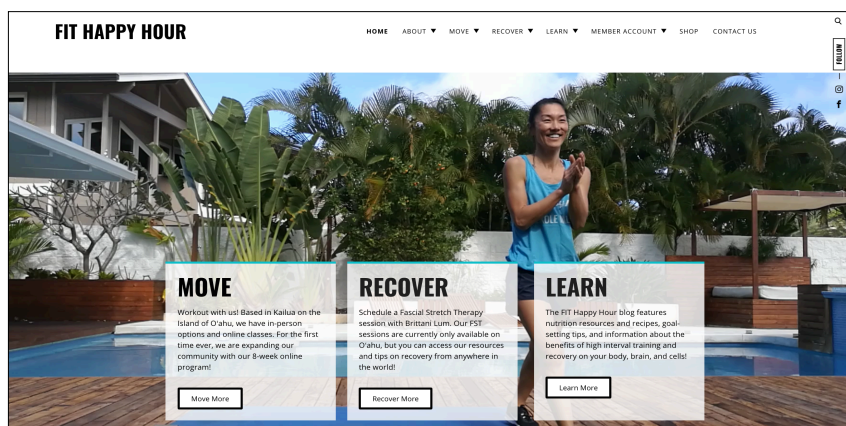


Figure 7. Final Homepage of the FIT Happy Hour Website

Methods

A total of 10 women participated in this study (Table 1). All participants were above the age of 30. Four participants (40%) were between the ages of 30 – 39 and four participants (40%) were 60 and above. One participant (10%) was between the ages of 40 – 49 and

one participant (10%) was between 50 – 59. For the highest education level achieved, 80% of participants had either a Bachelor’s or Master’s degree, while for occupation, 50% were employed, 20% were self-employed, and 30% were retired. Additionally, 80% were either married or in a civil union.

Table 1. Participant Age, Education Level, Occupation, and Marital Status

Characteristics	Number	Percent
<i>Age</i>		
30 - 39	4	40%
40 - 49	1	10%
50 - 59	1	10%
60+	4	40%
<i>Education Level</i>		
High School Degree	1	10%
Bachelor’s Degree	4	40%
Master’s Degree	4	40%
Doctorate Degree	1	10%
<i>Occupation</i>		
Employed	5	50%
Self-Employed	2	20%
Retired	3	30%
<i>Marital Status</i>		
Married/Civil Union	8	80%
Single, Never Married	1	10%
Divorced	1	10%

In this study, participants all matched the target population, with 50% being either current or past FIT Happy Hour members. Potential participants were contacted in person, by phone, or by email. Most participants completed the one-on-one usability sessions in-person, but four sessions were completed online using Google Hangouts. A total of 15

people were contacted to participate, but in total, three participants were in Round 1 of testing, three participants were in Round 2 of testing, and four participants were in Round 3 of testing.

Prior to the usability test, participants were sent a recruitment letter and a consent form (Appendix A and B, respectively). The recruitment letter elaborated the purpose of the study and that participation was optional, and the consent form contained information about the activities, the length of the study, the risks and benefits, confidentiality and privacy, and contact information.

Upon completion of the consent form, a link to the pre-survey was provided to the participants prior to the usability session (Appendix C). Participants were also emailed the lists of tasks they would complete during the usability session as a reference (Appendix D).

The tasks started with the user looking at and scrolling through the home page of the website. The user was instructed not to click on anything and was prompted to do a narrative around the following questions:

1. What do you notice first? What strikes you about it?
2. What are your initial impressions of the layout of the page and what do you think of the colors, graphics, photos, etc.?
3. What are your thoughts of the text on this page?
4. What do you think this website is about? Why do you think so?
5. Who is it for? What makes you think so?
6. What do you think people can do on this website? How can you tell?
7. If you were to click on something on this homepage, where would you click first?
8. What, if any, other comments do you have?

Users were then asked to complete four tasks and were prompted to provide suggestions for making the task easier. Each task was followed by a user-rating of the difficulty of the task, where

- 0 = Zero Frustration (Participant completed task with zero difficulty)
- 1 = Little Frustration (Participant completed task with only minor problem(s))
- 2 = Medium/High Frustration (Participant completed task with more effort/time)
- 3 = Point of Failure (Participant did not complete task).

The four tasks were as follows:

1. **Finding the Purpose:** “You want to learn more about who the online program is for and what to expect. How would you find this information?”
2. **Finding a Specific Workout:** “It is Thursday on the third week of the eight week program. You need to find the workout video for that day. How would you find this resource?”

3. **Finding a Specific Movement:** “You are unfamiliar with one of the exercises used for the workout that day. Locate the video that shows you how to do side lunges. How would you find this resource?”
4. **Posting a Comment:** “You want to learn more about goal-setting. You want to post a comment to ask more information about an article on how to set goals. How would you do this?”

At the conclusion of the usability session, participants were provided the link to the post-survey (See Appendix E).

Results

The purpose of this usability study was to create and evaluate the ease-of-use of the eight-week online fitness program within the FIT Happy Hour website. More specifically, the usability study assessed the learnability, effectiveness, and satisfaction of the website. The results section will address each of these categories as well as the findings of the pre-survey and post-survey.

Pre-Survey. In addition to the demographic data collected on participants, the pre-survey asked questions around their use of the Internet and their level of motivation to use an online fitness program. All 10 participants (100%) use the Internet daily and eight participants (80%) have used the Internet for 16+ years with two participants (20%) using it between 11 – 15 years. Participant use of the Internet included email, research, social media, news, and entertainment. Seven participants (70%) indicated they “agree” that they would be motivated to use the eight-week online program, one participant (10%) each said “neutral,” “disagree,” and “strongly disagree.”

Learnability. Learnability is an area of usability that measures the user’s ability to locate information. Learnability includes task completion, success, and the speed by which users can complete the task. It involves the paths they take, where they stumble and the efficiency of the tasks they take, regardless of whether those were the intended paths. Learnability addresses the problems the users encounter and points of confusion. Learnability also includes paths users look for but cannot find, because the paths are inefficient or nonexistent.

Task 1, Finding the Purpose, asks participants to identify who the online program is for and what to expect. The participants all identified that the target population appeared to be women based on the photographs featured on the homepage as well as text on the website indicating that the online program was “suitable for any and all levels.” And while the number of participants who rated this task as “Zero Frustration” increased from the first round, there was still low to medium frustration even in the second and third round after changes were made on the website to express the target population in both imagery and text (Figure 8). However, at least one participant per round had difficulty deciphering whether the task was to find out the purpose of the website or to find the purpose of the online program. The confusion may have been more of an issue with the wording of the task as opposed to the difficulty of what the task was trying to measure.

There was also some confusion around the in-person classes and the online program. Therefore, more emphasis was placed on the eight-week program when users would click on “Move” with less emphasis on the Kailua in-person classes.

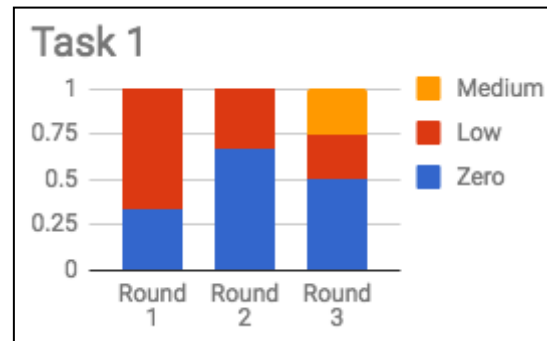


Figure 8. Participant Difficulty Rating for Task #1

The second task ended up measuring two separate but interrelated tasks. The intended task was for the participant to find Day 18. This was the Thursday on the third week of the eight-week program. In order to access this information, participants had to register for the program. For all participants, once they registered and gained full access to the website, they found it very easy to find the Day 18 workout day. However, there were ongoing issues with the membership processes.

In order to protect and hide content, a membership plugin was required on the WordPress website. Rounds 1 and 2 utilized “Paid Memberships Pro” and a discount code (usabilityparticipant) was given to the participant to use when checking out to avoid payment. Paid Memberships Pro had a user-friendly registration and discount code feature as seen in Figure 9, where 100% of the participants from Rounds 1 and 2 had no issues. However, after the usability session, a participant from Round 2 found that she could not log back in to the website. There were ongoing issues with participants not being able to log in after registration due to plugin incompatibility. Prior to Round 3, the membership plugin “Simple Membership” was utilized. As seen in Figure 9, the registration processes, for the purposes of the usability study, were not as easy. “Simple Membership” does not currently have discount code capabilities. Therefore, I had to create an additional membership level that was free for the usability study. This was not as natural of a process as the “Paid Memberships Pro,” but functionally, “Simple Membership” surpassed the previous plugin because participants could register, logout, and login as intended.

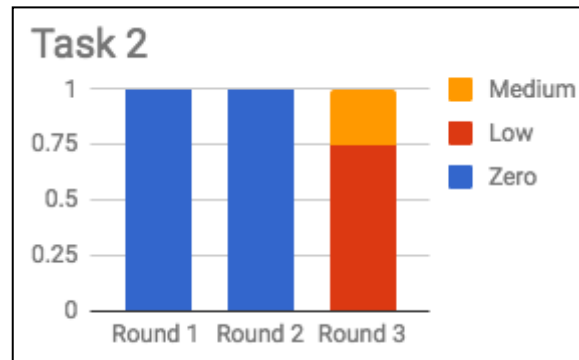


Figure 9. Participant Difficulty Rating for Task #2

Task 3 asked participants to find the workout demonstration video for side lunges, and 100% of participants from Round 1 ($n = 3$) rated the task as a one, or low frustration. Following Round 1, the subheading of “Movement Demonstrations” was added to the main menu to expedite user’s ability to find the movement demonstration page. From there, the movement demonstration page remained the same throughout the three rounds with an embedded playlist of all movements’ demonstration videos from YouTube.

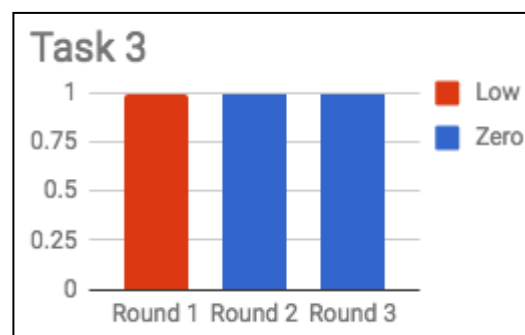


Figure 10. Participant Difficulty Rating for Task #3

The final task ended up being the most difficult of the tasks even though it was the least important task in terms of the functionality and usability of the website. The task prompts the participant to post a comment on an article about goal-setting. The intention was for participants to go to the blog and access an article to not only gain information, but also to interact with other program participants and the coaches. The level of difficulty, and frustration experienced by participants, decreased with each round (Figure 11). One participant failed to complete the task in the first round. In the first round, the main menu had “Learn” as an option, but did not contain any submenu items. When participants clicked on “Learn” to access the blog posts, the blog posts were categorized by date posted, not by category. To improve the usability of the blog, the submenu items under “Learn” were populated by blog categories including Nutrition, Exercise, Goal-Setting, Recovery, and Miscellaneous. The participants still had some difficulty finding the location of where to post a comment to a blog article. Part of the problem was that the location of the blog comment section was located below the built-in page navigation, and participants did not scroll far enough to find it. However, this was built into the WordPress theme template. The blog was intended to serve as a community-building

platform, but since participants had some difficulty navigating the blog, a secret Facebook group was used instead. The blog became an information dissemination tool.

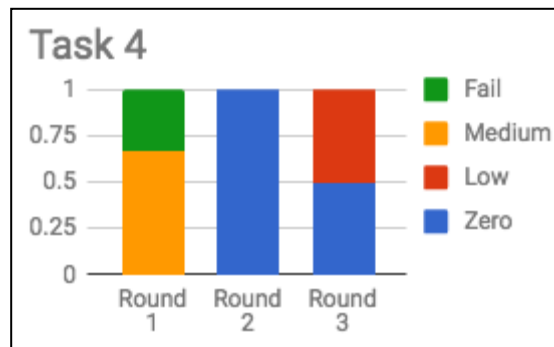


Figure 11. Participant Difficulty Rating for Task #4

There were additional features in the website that were either vague or confusing that participants experienced in the usability session even though these paths or tasks were not explicit prompted scenarios. For example, in Round 3, a participant noted that in the main menu, “Move” was the only link that did not go anywhere. To improve the usability of the main menu and to reduce confusion, the three main menu items – Move, Recover, and Learn – were all unlinked. To do this, pages were consolidated and made clearer. With the change to the “Simple Membership” plugin, there were new issues associated with the Login/Logout feature. It created confusion and was not user-friendly. Instead a login widget was added to the footer menu to prompt members to login with their username and password, or it would show their member information including their username, their membership level, the date of expiration, and a logout link.

Effectiveness and Satisfaction. Effectiveness and satisfaction are areas of usability that measure the user’s perception of the content. The effectiveness of the website includes impressions of parts of the website and measuring whether the user understands the purpose of the section of the website. User satisfaction is key to the FIT Happy Hour website. The usability measures whether users want to engage with particular sections of the website, and their impressions of the website as a whole and in parts.

According to participant ratings of the quality of the content, eight participants (80%) rated it “excellent” and two participants (20%) rating it “good.” Likewise, for quantity of the content, seven participants (70%) rated it “excellent” with three participants (30%) rating it “good.” Additionally, nine participants (90%) rated the accuracy of the information on the website as “excellent” and one participant (10%) rated it “good.”

Based on post-survey data, eight participants (80%) rated the layout and design as “excellent” with two participants (20%) rating it as “good.” For ease of navigation, four participants (40%) indicated “excellent” and six participants (60%) rated the navigation “good.” Participants generally characterized the website as straightforward and easy to navigate due to bolded fonts, varying font sizes, and clear labels. One participant noted, “It is basically easy. I would be able to find what I was looking for when I needed it.”

Another participant said, “clear headings with clear drop-down options make navigation easy.”

Overall feedback for the website in terms of satisfaction was positive. In the post-survey, participants were asked what they liked best about the website. Many responses related to the vibe of the website. For example, a participant said, “the ease of navigation and the general feel of the website is that it is a program for everyone...it felt very inclusive, welcoming, and down-to-earth.” Nine participants (90%) noted aesthetics and design as their favorite aspects of the website, which includes colors, photos, visuals, and balance. Additionally, six people (60%) highlighted content and information as favorite aspects of the website.

Among the participants of the usability study, eight participants (80%) said that it is “very likely” that they will use the website, while one participant (10%) said they are “likely,” and one participant (10%) said they are “neutral.” Some participants were interested in the eight-week program while others were primarily interested in the content open to everyone such as the movement demonstration videos and the articles provided in the blog. Overall, seven participants (70%) said that they “Completely Agree” that the website meets their needs and three participants (30%) said that they “Agree” that the website meets their needs.

After conducting a round of usability testing, the designer should generate “a short list of the most serious problems and a commitment to fixing them before the next round of testing” (Krug, 2010, p. 26). See Appendix F for a list of the most serious problems per round including the interpretations and the corresponding recommendations. A severity rating is also included per interpretation and recommendation based on Nielsen’s severity ratings (1995) for usability problems described (Appendix G).

Discussion and Conclusions

The three rounds of usability testing proved invaluable in the development and implementation of the FIT Happy Hour website. The membership portion of the website was a highly nuanced and complicated endeavor that required numerous rounds of testing outside of the usability sessions. The membership plugins used initially often had conflicts with other plugins or did not have the capabilities promised or expected. The intention behind the design and feel of the website stayed consistent throughout the rounds of usability testing, but additional navigational shortcuts and pathways were added with each round for ease-of-use for participants and to improve overall learnability, satisfaction, and effectiveness. Task #4 in the usability testing revealed that an external community-building platform was necessary to obtain a high level of communication and support outside of the website itself. The website itself became a much larger consortium of content with over 130 pages and added plugins that were not envisioned at the beginning. However, with instructional design elements included such as task completion and progress trackers, it provides additional feedback for both the website administrators and the members themselves to heighten the likelihood of member retention and program completion.

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APPENDIX A Recruitment Letter

Recruitment Letter

<<Date>>
<<Name of potential participant>>
<<Address>>
<<City, State, Zip>>

Dear <<Participant's Name>>:

My name is Lauren Ho and you are invited to take part in a research study. I am a graduate student at the University of Hawai'i at Mānoa in the Department of Learning Design & Technology. As part of the requirements for earning my graduate degree, I am doing a research project. The purpose of my project is to develop and evaluate the ease-of-use, navigation, and overall satisfaction users experience of the website, Optimize Your Years, which is an eight-week fitness program for women who want to slow down the aging process. These are workouts that you can do anywhere and on your own time. The time commitment for the study will be 60 to 90 minutes in total. I am asking you to participate because you fit in the target population: Women ages 30 and over. Please note that this study is evaluating the website, and you will not be exercising as part of the study.

There will be a follow-up to this letter. You will receive a phone call within the next week. You can opt out by calling or emailing me to request that no further contact be made. Additionally, if you have further interest in the study, it does not mean that you will be enrolled in the study. Even if you agree to participate, you can opt out of the study at any time. Agreement to be contacted or a request for more information does not obligate you to participate in any study.

If you would like additional information about this study, please call Lauren Ho at (808)224-9044 or email at lauren.ho@hawaii.edu.

Thank you again for considering this research opportunity.

Sincerely,

Lauren Ho

APPENDIX B

Consent Form



University of Hawai'i
Consent to Participate in a Research Project
 Lauren Ho, Principal Investigator
Project title: FIT Happy Hour - A Usability Study

Aloha! My name is Lauren Ho and you are invited to take part in a research study. I am a graduate student at the University of Hawai'i at Mānoa in the Department of Learning Design & Technology. As part of the requirements for earning my graduate degree, I am doing a research project. The purpose of my project is to develop and evaluate the ease-of-use, navigation, and overall satisfaction users experience of the website, which has an eight-week fitness program for women who want to slow down the aging process. I am asking you to participate because you fit in the target population: Women ages 30 and over.

Activities and Time Commitment: If you participate in this project, I will meet with you for the usability study at a location and time convenient for you. There will be a pre-survey and post-survey that will be completed before and after the usability study. The usability study will consist of 10-15 open ended questions. It will take 45 minutes to an hour. Interview questions will include questions like, "What features of the website were vague or confusing?" "What did you like the best/least?" "What might be some ways to improve this task?" In total, your time commitment will range from an hour to 90 minutes.

Only you and I will be present during the usability study. With your permission, I will do a screen and audio recording of the usability study so that I can later transcribe the discussion, view your navigation of the website, and analyze the responses. You will be one of three to five people who will participate in this round of the study. There will be three rounds total with three to five people each round.

Benefits and Risks: There will be no direct benefit to you for participating in this study. The results of this project may help improve the development of the website that may benefit future website users. I believe there is little risk to you for participating in this project. You may become stressed or uncomfortable during the usability study. If you do become stressed or uncomfortable, you can skip that section of the study or take a break. You can also stop the study or you can withdraw from the project altogether. Please note that you will be evaluating the website and you will not be exercising as part of the study.

Privacy and Confidentiality: I will keep all study data secure in a locked filing cabinet in a locked office/encrypted on a password protected computer. Only my University of Hawai'i advisor and I will have access to the information. Other agencies that have legal permission have the right to review research records. The University of Hawai'i Human Studies Program has the right to review research records for this study.

After I write a copy of the interview, I will erase or destroy the audio-recordings and screen recording. When I report the results of my research project, I will not use your name. I will not use any other personal identifying information that can identify you. I will use pseudonyms (fake names) and report my findings in a way that protects your privacy and confidentiality to the extent allowed by law.

Voluntary Participation: Your participation in this project is completely voluntary. You may stop participating at any time. If you stop being in the study, there will be no penalty or loss to you.



University of Hawai'i
Consent to Participate in a Research Project
 Lauren Ho, Principal Investigator
Project title: FIT Happy Hour - A Usability Study

Questions: If you have any questions about this study, please call or email me at (808)224-9044 or lauren.ho@hawaii.edu. You may also contact my advisor, Dr. Catherine Fulford, at (808)956-3906 or fulford@hawaii.edu. You may contact the UH Human Studies Program at (808)956-5007 or uhirb@hawaii.edu to discuss problems, concerns and questions; obtain information; or offer input with an informed individual who is unaffiliated with the specific research protocol. Please visit <https://www.hawaii.edu/researchcompliance/information-research-participants> for more information on your rights as a research participant.

If you agree to participate in this project, please sign and date this signature page below for your records and sign and date page 3 and return it to Lauren Ho.

Keep this copy of the informed consent for your records and reference.

Signature(s) for Consent:

I give permission to join the research project entitled, *FIT Happy Hour: A Usability Study*."

Please initial next to either "Yes" or "No" to the following:

____ Yes ____ No I consent to be audio-recorded for the interview portion of this research.

____ Yes ____ No I consent to being video-recorded (screen record only) for the interview portion of this research.

Name of Participant (Print): _____

Participant's Signature: _____

Signature of the Person Obtaining Consent: _____

Date: _____

Mahalo!



University of Hawai'i
Consent to Participate in a Research Project
Lauren Ho, Principal Investigator
Project title: FIT Happy Hour - A Usability Study

Signature(s) for Consent:

I give permission to join the research project entitled, *FIT Happy Hour: A Usability Study.*"

Please initial next to either "Yes" or "No" to the following:

<input type="checkbox"/> Yes	<input type="checkbox"/> No	I consent to be audio-recorded for the interview portion of this research.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	I consent to being video-recorded (screen record only) for the interview portion of this research.

Name of Participant (Print): _____

Participant's Signature: _____

Signature of the Person Obtaining Consent: _____

Date: _____

APPENDIX C

Pre-Survey

Pre-Survey

Please complete the following questions before you start the usability study. Thank you for participating!

1. Name

2. What is your age?

Mark only one oval.

- ☐ 30-39 years old
- ☐ 40-49 years old
- ☐ 50-59 years old
- ☐ 60+ years old

3. What is the highest degree or level of school you have completed? If currently enrolled, highest degree received.

Mark only one oval.

- ☐ No schooling completed
- ☐ Nursery school to 8th grade
- ☐ Some high school, no diploma
- ☐ High school graduate, diploma or the equivalent (for example: GED)
- ☐ Some college credit, no degree
- ☐ Trade/technical/vocational training
- ☐ Associate degree
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Professional degree
- ☐ Doctorate degree

4. Marital Status*Mark only one oval.*

- ☐ Single, never married
- ☐ Married or domestic partnership
- ☐ Widowed
- ☐ Divorced
- ☐ Separated

5. Employment Status: Are you currently...?*Check all that apply.*

- ☐ Employed for wages
- ☐ Self-employed
- ☐ Out of work and looking for work
- ☐ Out of work but not currently looking for work
- ☐ A homemaker
- ☐ A student
- ☐ Military
- ☐ Retired
- ☐ Unable to work

6. Number of years using the web:*Mark only one oval.*

- ☐ 0-5 years
- ☐ 6-10 years
- ☐ 11-15 years
- ☐ 16+ years

7. How often do you use the internet?*Mark only one oval.*

- ☐ Daily
- ☐ Weekly
- ☐ Monthly
- ☐ Occasionally
- ☐ Never

8. What do you usually do on the internet?*Check all that apply.*

- ☐ Email
- ☐ News
- ☐ Research
- ☐ Games
- ☐ Social Media
- ☐ Entertainment
- ☐ Other: _____

9. I am motivated to use an online workout program for women over 30.*Mark only one oval.*

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly agree

Pre-Survey

10. Explain your answer for the previous question. (Example: I put neutral because I want to lose weight, but I don't know if I will actually do the program.)

11. What, if any, exercises or workout regimens do you currently do?

12. How many days do you exercise per week?

Mark only one oval.

- ☐ 0
- ☐ 1
- ☐ 2 -3
- ☐ 4 - 7

APPENDIX D

Script and Task Scenarios

Usability Study Script

Hi, [insert participant's name]. My name is Lauren, and I'm going to be walking you through this session today. Before we begin, I have some information for you, and I'm going to read it to make sure that I cover everything.

I want to talk a little about why you are here. I'm asking people to try using a website to see if it works as intended. The session should take about 30 minutes. The first thing I want to make clear right away is that I'm testing the *site*, not you. You can't do anything wrong here. In fact, this is probably the one place today where you don't have to worry about making mistakes. As you use the site, I'm going to ask you as much as possible to try to think out loud: to say what you're looking at, what you're trying to do, and what you're thinking. This will be a big help. Also, please don't worry that you're going to hurt my feelings. I'm doing this to improve the site, so I need to hear your honest reactions.

If you have any questions as we go along, just ask them. I may not be able to answer them right away, since I'm interested in how people do when they don't have someone who can help. But if you still have any questions when we're done I'll try to answer them then.

And if you need to take a break at any point, just let me know. Do you have any questions so far? Before we look at the site, I'd like to ask you just a few quick questions about your experiences online. [\[Ask participant to complete the Post – Survey\]](#) OK, great. We're done with the questions, and we can start testing out the site.

[Start Usability Test. Ask participant to open the website.](#)

I'm going to ask you to look at this page and tell me what you make of it. You can scroll if you want to, but don't click on anything yet. Can you do a little narrative around the following questions?

1. What do you notice first? What strikes you about it?
2. What are your initial impressions about the layout of this page and what do you think of the colors, graphics, photos, etc.?
3. What are your thoughts of the text on this page?
4. What do you think this website is about? Why do you think so?
5. Who is it for? What makes you think so?
6. What do you think people can do on this website? How can you tell?
7. If you were allowed to click on something on this homepage, where would you click first?
8. Do you have any other comments?

Thanks for doing that. You did a great job. Now I'm going to ask you to try doing some specific tasks. I'm going to read each one out loud. You should have received a copy of these in your email before this study.

I'm also going to ask you to do these tasks without using any search features. We'll learn a lot more about how well the site works that way. And again, as much as possible, it will help us if you can try to think out loud as you go along.

Task 1: Finding the Purpose: "You want to learn more about who the course is for and what to expect. How would you find this information?"

Participant's Verbal comments:

Any suggestions for making this (task) easier?

Can you indicate rate the difficulty of this task?

0	1	2	3
[Zero Frustration]	[Little Frustration]	[Medium/ High Frustration]	[Point of Failure]

0 =Participant completed task with zero difficulty.

1 = Participant completed task with only minor problem(s).

2 =Participant completed task with more effort/time/dead-ends.

3 =Participant did not complete task.

Task 2: Finding a Specific Workout: "It is Thursday on the third week of the eight week program. You need to find the workout video for that day. How would you find this resource?"

Participant's Verbal comments:

Any suggestions for making this (task) easier?

Can you indicate rate the difficulty of this task?

0	1	2	3
[Zero Frustration]	[Little Frustration]	[Medium/ High Frustration]	[Point of Failure]

0 =Participant completed task with zero difficulty.

1 = Participant completed task with only minor problem(s).

2 =Participant completed task with more effort/time/dead-ends.

3 =Participant did not complete task.

Task 3: Finding a Specific Movement: "You are unfamiliar with one of the exercises used for the workout that day. Locate the video that shows you how to do side lunges. How would you find this resource?"

Participant's Verbal comments:

Any suggestions for making this (task) easier?

Can you indicate rate the difficulty of this task?

0	1	2	3
[Zero Frustration]	[Little Frustration]	[Medium/ High Frustration]	[Point of Failure]

0 =Participant completed task with zero difficulty.

1 = Participant completed task with only minor problem(s).

2 =Participant completed task with more effort/time/dead-ends.

3 =Participant did not complete task.

Task 4: Posting a Comment: “You want to learn more about goal-setting. You want to post a comment to ask more about an article on how to set goals. How would you do this?”

Participant’s Verbal comments:

Any suggestions for making this (task) easier?

Can you indicate rate the difficulty of this task?

0	1	2	3
[Zero Frustration]	[Little Frustration]	[Medium/ High Frustration]	[Point of Failure]

0 =Participant completed task with zero difficulty.

1 = Participant completed task with only minor problem(s).

2 =Participant completed task with more effort/time/dead-ends.

3 =Participant did not complete task.

Thanks, that was very helpful. We are done with the main questions, and the last part is just a post-survey that you can do online (Google Forms).

[\[Ask participant to complete the Post – Survey\]](#)

Do you have any questions for me, now that we’re done?

I want to thank you for your time and willingness to be a participant in this study.

APPENDIX E

Post-Survey

Post-Survey

Thank you for participating in the usability study. Please complete the following survey to complete the study.

*** Required**

1. Rate the overall quality of the website. *

Mark only one oval.

	1	2	3	4	5	
Poor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Excellent

2. How would you rate your experience during today's testing? *

Mark only one oval.

	1	2	3	4	5	
Very difficult	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very easy

3. Please rate the following attributes of the website: *

Mark only one oval per row.

	Poor	Below Average	Average	Good	Excellent
Accuracy of Information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meeting My Needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quantity of Content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of Content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Layout/Design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ease of Navigation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Post-Survey

4. What features of the Optimize Your Years website were vague or confusing to you, if any?

5. What is your impression about navigating the website? Does it seem easy or difficult? What makes it that way?

6. What did you like best about the website?

7. What did you like the least about the website?

APPENDIX F

Interpretations and Recommendations

Round 1

Interpretation and Recommendation #1. The photo on the main page is the first thing the user notices, and it conveys a message that it is for high-level athletes. This photo is slightly blurry and should be sharper. It should be changed to a high-quality photo that conveys who the target population is (women over 30) and that the 8-week program is for any level. That information should also be highlighted more so that a user does not need to search for that information.

3 = Major usability problem: Important to fix, so should be given high priority

Interpretation and Recommendation #2. Users had a very difficult time finding blog posts by category and they could not figure out how to comment on the post. The posting is standard for WordPress, but it is essential to make the content easy to find. Adding categories to the main menu under “blog” or changing the main menu to “learn” will make it easier for users to find information they are interested in.

3 = Major usability problem: Important to fix, so should be given high priority

Interpretation and Recommendation #3. Remove the pop up subscription. While one user said that she would subscribe first, all users said the first thing they would do is exit out of the pop up before looking at everything else. The subscription box could be static on the homepage at the bottom.

2 = Minor usability problem: Fixing this should be given low priority

Round 2.

Interpretation and Recommendation #1. The website looks like it is for middle-aged women. Needs more information about who the 8-week program is for. Needs more differentiation between the in-person and online classes. Should have who each program is for or make it clear that all programs are for the target population. Add online to “8-week program” in main menu to differentiate between online and in-person.

2 = Minor usability problem: Fixing this should be given low priority

Interpretation and Recommendation #2

Add the contact form to at least the homepage and “about” page.

3 = Major usability problem: Important to fix, so should be given high priority

Interpretation and Recommendation #3. The language used is not pretentious and seems unintimidating. It should be balanced with improving the language.

3 = Major usability problem: Important to fix, so should be given high priority

Note:

Although not part of the usability study, users found that they were unable to log into the website after returning to the website. After this round, the membership plugin was changed from Paid Memberships Pro to Simple Membership.

Round 3.

Interpretation and Recommendation #1. Change “Move” on main menu to clickable or change the others to unclickable and consolidate the main menu.

2 = Minor usability problem: Fixing this should be given low priority

Interpretation and Recommendation #2. Provide a sample page and more information on the target audience.

3 = Major usability problem: Important to fix, so should be given high priority

Interpretation and Recommendation #3. Take user to “welcome page” after registering for the first time.

3 = Major usability problem: Important to fix, so should be given high priority

Interpretation and Recommendation #4. Adjust the login/logout to be clearer about whether or not you’re logged in.

3 = Major usability problem: Important to fix, so should be given high priority

APPENDIX G

Nielsen's Severity Ratings

Recommendations for Change

- 0** = I don't agree that this is a usability problem at all
- 1** = Cosmetic problem only: Need not be fixed unless extra time is available
- 2** = Minor usability problem: Fixing this should be given low priority
- 3** = Major usability problem: Important to fix, so should be given high priority
- 4** = Usability catastrophe: Imperative to fix this before product can be released